Part No. P0987357 02

Business Communications Manager 2.5

Upgrade Guide

NORTEL NETWORKS™

How to get help

USA and Canada

Authorized Distributors - ITAS Technical Support

Telephone:
1-800-4NORTEL (1-800-466-7835)
If you already have a PIN Code, you can enter Express Routing Code (ERC) 196#.
If you do not yet have a PIN Code, or for general questions and first line support, you can enter ERC 338#.

Website:
http://www.nortelnetworks.com/itas/

email:
naitas@nortelnetworks.com

Presales Support (CSAN)

Telephone:
1-800-4NORTEL (1-800-466-7835)
Use Express Routing Code (ERC) 1063#

EMEA (Europe, Middle East, Africa)

Technical Support - CTAS

Telephone:
00800 800 89009 or 33 4 9296 1341

Fax:
33 49296 1598

email:
emeahelp@nortelnetworks.com

CALA (Caribbean & Latin America)

Technical Support - CTAS

Telephone:
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csrmgmt@nortelnetworks.com

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Technical Support - CTAS

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Business Communications Manager 2.5 Upgrade

To perform the Business Communications Manager upgrade

1. Determine whether you can perform the upgrade

You can perform the upgrade on a Business Communications Manager platform only. Do not perform the upgrade on an Enterprise Edge 1.0 hardware platform. To determine whether you have an Enterprise Edge or a Business Communications Manager platform, check the Comm Port connectors. If the ports are multicolored you have a Business Communications Manager platform and can perform the upgrade. If the ports are not multicolored, you have an Enterprise Edge 1.0 hardware platform and cannot perform the upgrade.

2. Ask the system administrator to request that subscribers delete their old voicemail messages

Ask the System Administrator to request that subscribers delete their old voicemail messages. Fewer messages enables the system to upgrade faster. During the upgrade, the message storage format is converted to a new format (from SBC to G711.)

3. Record the 2.0.3 configuration data

Use the tables in “Business Communications Manager 2.0.3 Configuration Information” on page 39 to record your 2.0.3 settings. After the upgrade, you must confirm that settings marked with ⇦ are present on the system. If not, reapply the settings using the values you recorded in these tables.

4. Print the Call Center Reporting Configuration Report

If you use Call Center Reporting, print the Configuration Report so you have a record of your configuration. Have the report handy during the upgrade. After the upgrade is complete you must manually re-enter the settings for skillset statistical thresholds, print schedules and wallboard information.

5. Perform the upgrade

Follow the instructions:

- “Performing the upgrade” on page 7
- “Installing the DRAM” on page 33
- “Installing the MS-PEC III cards” on page 37

6. Verify the upgrade is successful and reapply the configuration data

Follow the instructions for the "Post-upgrade system check" on page 23 and confirm that settings marked with ⇦ that you recorded in the "Business Communications Manager 2.0.3 Configuration Information" on page 39 are present on the system. If not, reapply the settings using the values you recorded in these tables.

7. Upgrade the clients

Follow the instructions "Upgrading clients" on page 28. You must upgrade the client applications.

Note: After you upgrade your Business Communications Manager system to 2.5 you cannot return it to 2.0.3. After you start the upgrade, do not stop or interrupt the upgrade.

Prerequisites for installing the upgrade

Warning: When you insert or remove the MS-PEC cards, be careful not to contact the MS-PEC cards with the MSC Printed Circuit Board. Incorrect handling of the MS-PEC cards during installation can result in the loss of telephony programming.

Note: During the upgrade, your Business Communications Manager system, including the telephony resources, is not functional.

Caution: You must wear an antistatic grounding strap at all times when you handle electronic components. Failure to do so can result in damage to the equipment or loss of telephony programming.

For your system

- Your Business Communications Manager system must be at 2.03. If your system is not at 2.03, refer to the Readme.html file on the 2.03 upgrade CD.

Note: Fax over IP is not available for Business Communications Manager 2.5. If you use Fax over IP, assess the impact of losing this capability before you begin the upgrade.

- Do not pre-install the DRAM or the MS-PEC III cards. You install these during the upgrade.

Note: If there are any mapped network drives on Business Communications Manager that are used by BRU, disconnect (unmap) these drives using VNC before you start the upgrade.

- Log out of any VNC sessions and quit any open Windows applications.

Note: Do not open any VNC or Unified Manager sessions while you perform the upgrade. These sessions can interfere with the progress of the upgrade. VNC access to the system is not automatically enabled in Business Communications Manager 2.5.

For the computer you use to do the upgrade

- Make sure your browser is set to check for newer versions of stored pages on every visit to the page, and you have cookies enabled. Refer to your browser's online Help for details.

Warning: Netscape is not supported to perform this upgrade. Only Internet Explorer 5.0 or 5.5 is supported.

- You must use a computer that is on the same network as your Business Communications Manager system.

- We strongly recommend that you use a computer that is within the same subnet as the Business Communications Manager system that you are upgrading.
- You must know how to share folders. If you use Windows 95, 98 or Me, you must enable file sharing. Refer to your Windows system documentation for how to share folders.

For VoIP Trunking

- Check the VoIP Remote Gateways that are configured on the Business Communications Manager 2.0.3 system. The Business Communications Manager system allows Remote Gateway names that are a maximum of 15 characters. If you have any Remote Gateways with names that are longer than 15 characters, or that contain spaces, rename the Remote Gateways so they are a maximum of 15 characters long and do not contain spaces. To rename the Remote Gateway, in Unified Manager remove the Remote Gateway and re-enter the Remote Gateway with the modified name.

For voicemail

- If you change the time zone setting for the Business Communications Manager system, all voicemail messages stored before the time zone change will be inaccessible. It is highly recommended that you select the time zone as one of the first items configured on the Business Communications Manager and that you do not change it. If it is necessary to change the time zone, notify subscribers to delete all stored messages in their mailboxes. You must reboot the Business Communications Manager system after you change the time zone. This information applies to Business Communications Manager 2.0.3 and 2.5 systems.

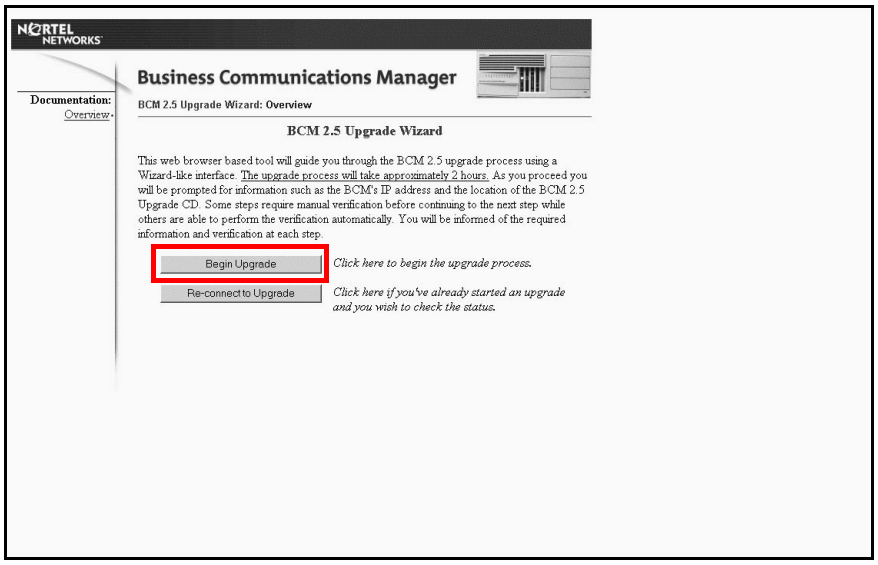
You are now ready to start the upgrade. The upgrade can take approximately two to three hours.

Note: A backup of the core telephony configuration is performed during the upgrade process. This backup is used during the upgrade to restore the core telephony configuration, if necessary. This backup can be used on BCM systems that have been upgraded from BCM 2.0.3 to BCM 2.5 but it cannot be used on systems that were purchased with BCM 2.5 software.

Performing the upgrade

Note: If the upgrade is interrupted before you have entered all the information, you must restart the upgrade. If the upgrade is interrupted after you have entered all the information, you must re-connect to the upgrade.

1 Insert the Disk 1 CD into your CD-ROM drive.
You must install Disk 1 before you install Disk 2.
If your CD-ROM drive is configured to run automatically, the BCM 2.5 Upgrade Wizard page appears. If your CD-ROM drive does not run automatically, double-click **index.html**.
The BCM 2.5 Upgrade Wizard page appears.

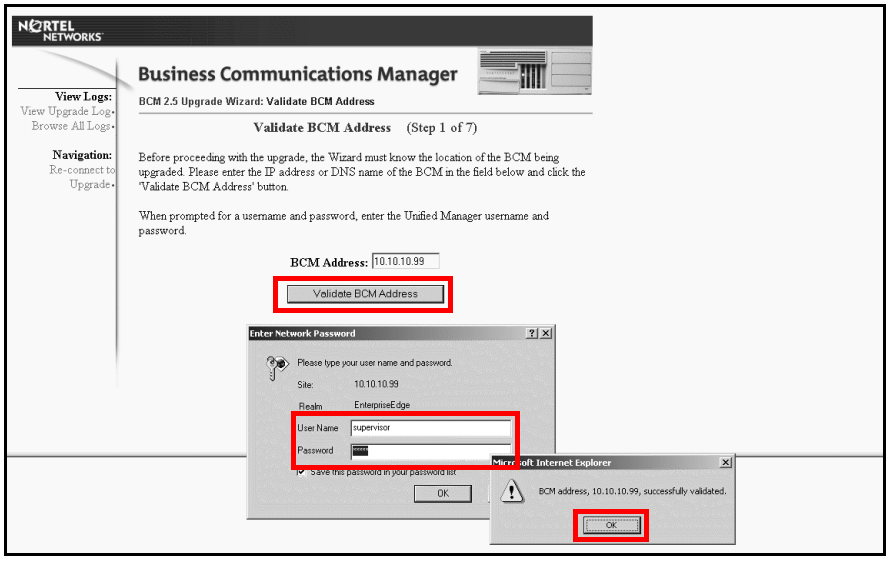

NORTEL NETWORKS
Business Communications Manager
Documentation:
Overview
BCM 2.5 Upgrade Wizard: Overview
BCM 2.5 Upgrade Wizard
This web browser based tool will guide you through the BCM 2.5 upgrade process using a Wizard-like interface. The upgrade process will take approximately 2 hours. As you proceed you will be prompted for information such as the BCM's IP address and the location of the BCM 2.5 Upgrade CD. Some steps require manual verification before continuing to the next step while others are able to perform the verification automatically. You will be informed of the required information and verification at each step.
Begin Upgrade
Click here to begin the upgrade process.
Re-connect to Upgrade
Click here if you've already started an upgrade and you wish to check the status.

2 Click the **Begin Upgrade** button.
The Pre-Upgrade Checklist page appears.

Note: During the upgrade:

- Do not use your browser's Back, Forward or Refresh buttons.
- Do not open any documents or web pages that can use the browser window.

3 After you read the upgrade conditions, click the **Next** button.
The Validate BCM Address Page appears.


NORTEL NETWORKS
Business Communications Manager
BCM 2.5 Upgrade Wizard: Validate BCM Address
View Logs:
View Upgrade Log
Browse All Logs
Navigation:
Re-connect to Upgrade
Validate BCM Address (Step 1 of 7)
Before proceeding with the upgrade, the Wizard must know the location of the BCM being upgraded. Please enter the IP address or DNS name of the BCM in the field below and click the 'Validate BCM Address' button.
When prompted for a username and password, enter the Unified Manager username and password.
BCM Address: 10.10.10.99
Validate BCM Address
Enter Network Password
Please type your user name and password.
Site: 10.10.10.99
Realm EnterpriseEdge
User Name supervisor
Password
OK
Microsoft Internet Explorer
BCM address, 10.10.10.99, successfully validated.
OK

Note: If at any time you see a "Page not displayed or Internal Server Error" message:

- Close your browser. DO NOT click Refresh.
- Remove and reinsert the CD if your CD-ROM runs automatically, or double-click **index.html** to resume the upgrade.
  The BCM 2.5 Upgrade Wizard page appears.
- Click the **Reconnect to Upgrade** button.
- Follow steps 4 through 8. You return to the page where the upgrade currently is and can continue the procedure.

4 In the **BCM Address** box type the IP address, DNS, network name or the Fully Qualified Domain Name of the Business Communications Manager system. It is recommended that you use the IP address.

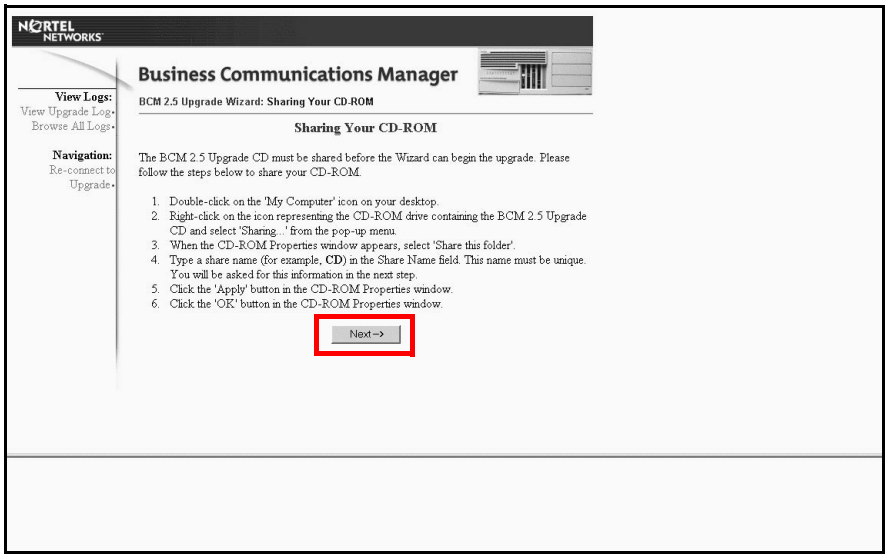
5 Click the **Validate BCM Address** button.
The Enter Network Password dialog box appears.

6 In the **User name** box type your Business Communications Manager user name.
The default Business Communications Manager user name is *supervisor*. If you cannot use your Business Communications Manager user name, use the default user name. When the upgrade is complete, you can resume using your user name.

7 In the **Password** box type your Business Communications Manager password.
The default Business Communications Manager password is *visor*. If you cannot use your Business Communications Manager password, use the default password. When the upgrade is complete, you can resume using your password.

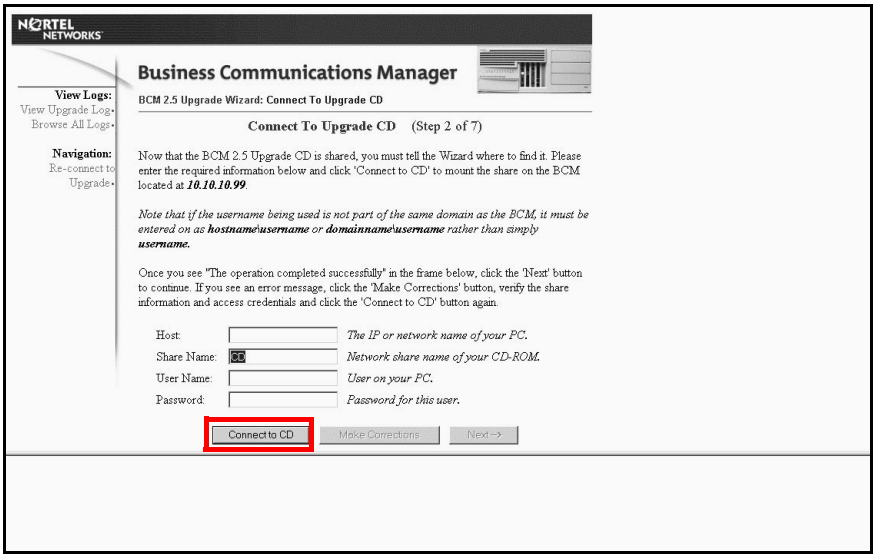
8 Click the **OK** button.
A message appears that the address is validated.

9 Click the **OK** button.
The Sharing Your CD-ROM page appears.


NORTEL NETWORKS
Business Communications Manager
View Logs:
View Upgrade Log
Browse All Logs
Navigation:
Re-connect to Upgrade
BCM 2.5 Upgrade Wizard: Sharing Your CD-ROM
Sharing Your CD-ROM
The BCM 2.5 Upgrade CD must be shared before the Wizard can begin the upgrade. Please follow the steps below to share your CD-ROM.
1. Double-click on the 'My Computer' icon on your desktop.
2. Right-click on the icon representing the CD-ROM drive containing the BCM 2.5 Upgrade CD and select 'Sharing...' from the pop-up menu.
3. When the CD-ROM Properties window appears, select 'Share this folder'.
4. Type a share name (for example, CD) in the Share Name field. This name must be unique. You will be asked for this information in the next step.
5. Click the 'Apply' button in the CD-ROM Properties window.
6. Click the 'OK' button in the CD-ROM Properties window.
Next ->

10 Follow the steps for sharing your folder. Refer to your system documentation for how to share folders.

11 Click the **Next** button.
The Connect to Upgrade CD page appears.


NORTEL NETWORKS
Business Communications Manager
View Logs:
View Upgrade Log
Browse All Logs
Navigation:
Re-connect to Upgrade
BCM 2.5 Upgrade Wizard: Connect To Upgrade CD
Connect To Upgrade CD (Step 2 of 7)
Now that the BCM 2.5 Upgrade CD is shared, you must tell the Wizard where to find it. Please enter the required information below and click 'Connect to CD' to mount the share on the BCM located at 10.10.10.99.
Note that if the username being used is not part of the same domain as the BCM, it must be entered on as hostname\username or domainname\username rather than simply username.
Once you see "The operation completed successfully" in the frame below, click the 'Next' button to continue. If you see an error message, click the 'Make Corrections' button, verify the share information and access credentials and click the 'Connect to CD' button again.
Host:
The IP or network name of your PC.
Share Name:
CD
Network share name of your CD-ROM.
User Name:
User on your PC.
Password:
Password for this user.
Connect to CD
Make Corrections
Next ->

12 In the **Host** box type the IP address, DNS, network name or Fully Qualified Domain Name of the computer you are using.

13 In the **Share Name** box type the share name you created for the installation files when you created the shared folder.

14 In the **User Name** box type your *hostname\username* or *domainname\username*.

Note: Be sure to type the information in the User Name box as *hostname\username* or *domainname\username*.

15 In the **Password** box type your password.

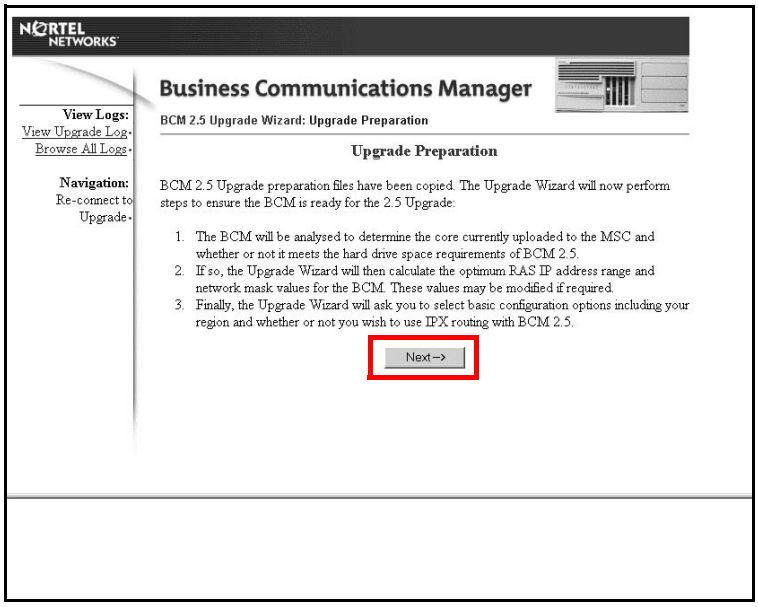
16 Click the **Connect to CD** button.
In the lower frame a message appears that you are connected.

Note: Check that you are connected before you go to the next step.

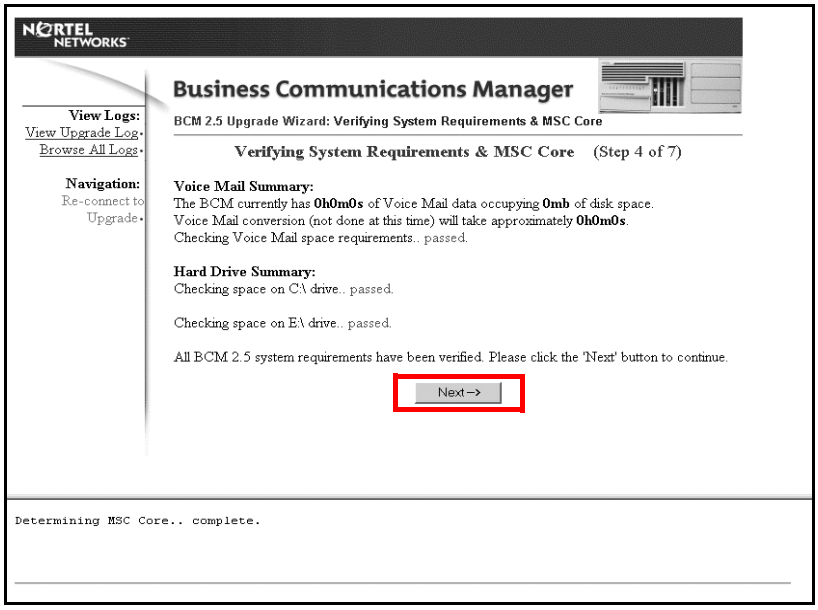
17 Click the **Next** button.
The Prepare BCM page appears.

NORTEL NETWORKS
Business Communications Manager
BCM 2.5 Upgrade Wizard: Prepare BCM
View Logs:
View Upgrade Log
Browse All Logs
Navigation:
Re-connect to Upgrade
Prepare BCM (Step 3 of 7)
Some preliminary files must now be copied to the BCM at 10.10.10.99 to prepare it for the upgrade. Please click the 'Prepare BCM Now' button below to begin copying the files.
THIS STEP WILL TAKE APPROXIMATELY 3 MINUTES TO COMPLETE
The Wizard will automatically proceed to the next step when all files have been copied.
Prepare BCM Now

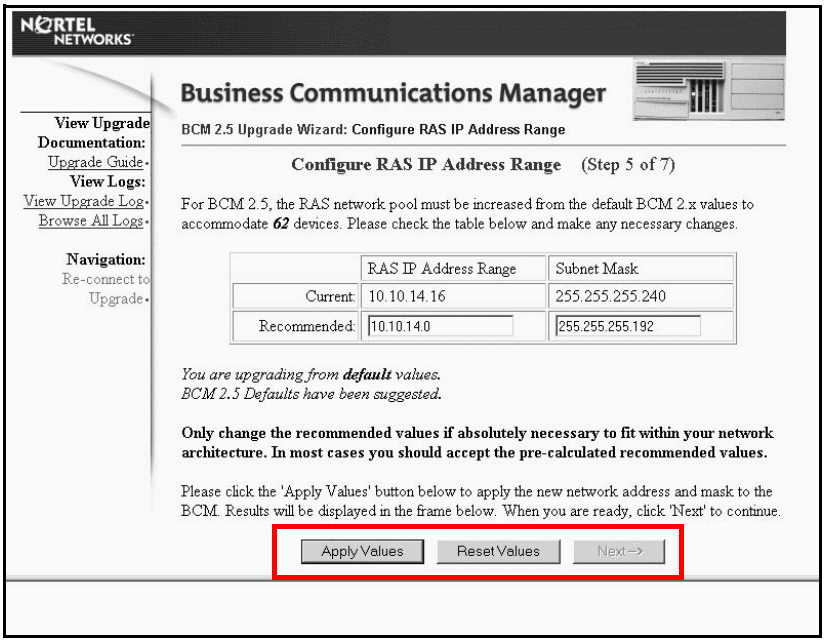
18 Click the **Prepare BCM Now** button.
The status is shown in the lower frame. The Upgrade Preparation page appears.


NORTEL NETWORKS
Business Communications Manager
BCM 2.5 Upgrade Wizard: Upgrade Preparation
View Logs:
View Upgrade Log
Browse All Logs
Navigation:
Re-connect to Upgrade
Upgrade Preparation
BCM 2.5 Upgrade preparation files have been copied. The Upgrade Wizard will now perform steps to ensure the BCM is ready for the 2.5 Upgrade:
1. The BCM will be analysed to determine the core currently uploaded to the MSC and whether or not it meets the hard drive space requirements of BCM 2.5.
2. If so, the Upgrade Wizard will then calculate the optimum RAS IP address range and network mask values for the BCM. These values may be modified if required.
3. Finally, the Upgrade Wizard will ask you to select basic configuration options including your region and whether or not you wish to use IPX routing with BCM 2.5.
Next–>

19 Click the **Next** button.
The Verifying System Requirements & MSC Core page appears.


NORTEL NETWORKS
Business Communications Manager
BCM 2.5 Upgrade Wizard: Verifying System Requirements & MSC Core
View Logs:
View Upgrade Log
Browse All Logs
Navigation:
Re-connect to Upgrade
Verifying System Requirements & MSC Core (Step 4 of 7)
Voice Mail Summary:
The BCM currently has 0h0m0s of Voice Mail data occupying 0mb of disk space.
Voice Mail conversion (not done at this time) will take approximately 0h0m0s.
Checking Voice Mail space requirements.. passed.
Hard Drive Summary:
Checking space on C:\ drive.. passed.
Checking space on E:\ drive.. passed.
All BCM 2.5 system requirements have been verified. Please click the 'Next' button to continue.
Next–>
Determining MSC Core.. complete.

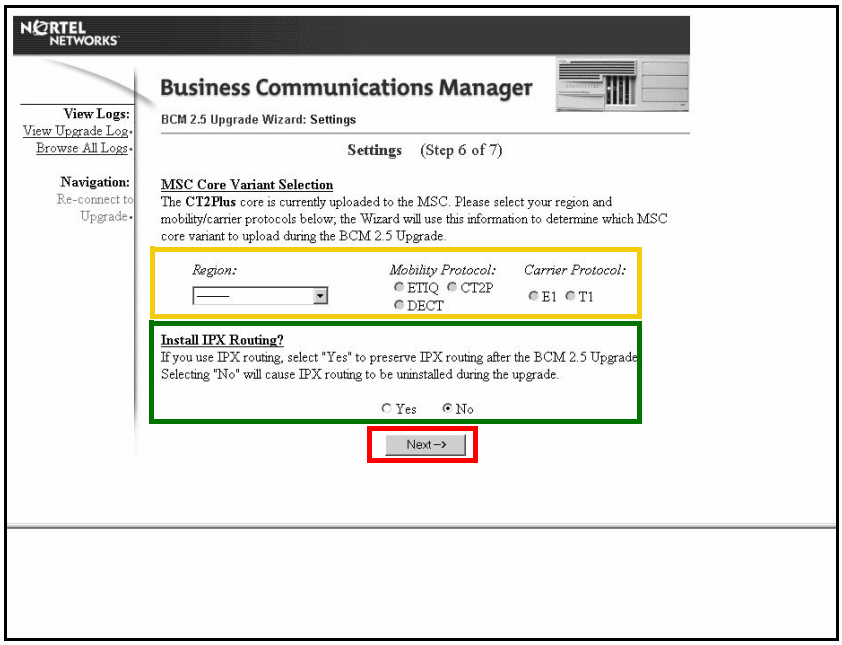
20 Click the **Next** button.
The Configure RAS IP Address Range page appears.


NORTEL NETWORKS
Business Communications Manager
BCM 2.5 Upgrade Wizard: Configure RAS IP Address Range
View Upgrade Documentation:
Upgrade Guide
View Logs:
View Upgrade Log
Browse All Logs
Navigation:
Re-connect to Upgrade
Configure RAS IP Address Range (Step 5 of 7)
For BCM 2.5, the RAS network pool must be increased from the default BCM 2.x values to accommodate 62 devices. Please check the table below and make any necessary changes.
RAS IP Address Range
Subnet Mask
Current:
10.10.14.16
255.255.255.240
Recommended:
10.10.14.0
255.255.255.192
You are upgrading from default values.
BCM 2.5 Defaults have been suggested.
Only change the recommended values if absolutely necessary to fit within your network architecture. In most cases you should accept the pre-calculated recommended values.
Please click the 'Apply Values' button below to apply the new network address and mask to the BCM. Results will be displayed in the frame below. When you are ready, click 'Next' to continue.
Apply Values
Reset Values
Next ->

21 Make sure that the Network Range and the Network Mask values in the **Recommended** boxes are accurate, then click the **Apply Values** button.In most cases you can accept the accept the settings that are shown.

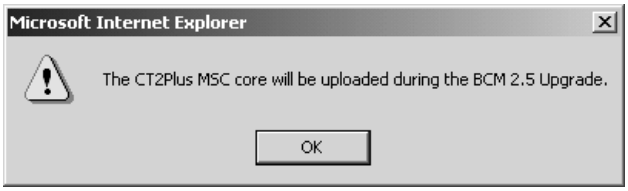
22 Click the **Next** button.
The Settings page appears.

23 Your MSC core variant is automatically detected.
From the **Region** list box select your region. Select the setting you had for Country for Business Communications Manager 2.0.3.

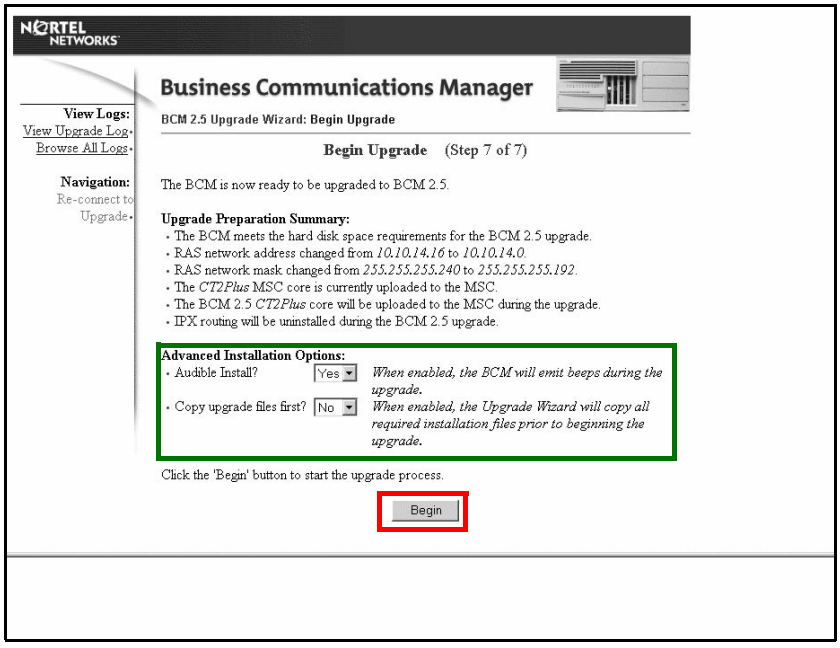

NORTEL NETWORKS
Business Communications Manager
BCM 2.5 Upgrade Wizard: Settings
View Logs:
View Upgrade Log
Browse All Logs
Navigation:
Re-connect to Upgrade
Settings (Step 6 of 7)
MSC Core Variant Selection
The CT2Plus core is currently uploaded to the MSC. Please select your region and mobility/carrier protocols below; the Wizard will use this information to determine which MSC core variant to upload during the BCM 2.5 Upgrade.
Region:
Mobility Protocol:
ETIQ CT2P DECT
Carrier Protocol:
E1 T1
Install IPX Routing?
If you use IPX routing, select "Yes" to preserve IPX routing after the BCM 2.5 Upgrade. Selecting "No" will cause IPX routing to be uninstalled during the upgrade.
Yes No
Next-->

24 If you use IPX routing, select **Yes**.
If you do not use IPX routing, leave this at the default setting of **No**.

25 Click the **Next** button.
A message appears that confirms the core that will be uploaded.



26 Click the **OK** button.
The Begin Upgrade screen appears.


NORTEL NETWORKS
Business Communications Manager
BCM 2.5 Upgrade Wizard: Begin Upgrade
View Logs:
View Upgrade Log
Browse All Logs
Navigation:
Re-connect to Upgrade
Begin Upgrade (Step 7 of 7)
The BCM is now ready to be upgraded to BCM 2.5.
Upgrade Preparation Summary:
• The BCM meets the hard disk space requirements for the BCM 2.5 upgrade.
• RAS network address changed from 10.10.14.16 to 10.10.14.0.
• RAS network mask changed from 255.255.255.240 to 255.255.255.192.
• The CT2Plus MSC core is currently uploaded to the MSC.
• The BCM 2.5 CT2Plus core will be uploaded to the MSC during the upgrade.
• IPX routing will be uninstalled during the BCM 2.5 upgrade.
Advanced Installation Options:
• Audible Install? Yes When enabled, the BCM will emit beeps during the upgrade.
• Copy upgrade files first? No When enabled, the Upgrade Wizard will copy all required installation files prior to beginning the upgrade.
Click the 'Begin' button to start the upgrade process.
Begin

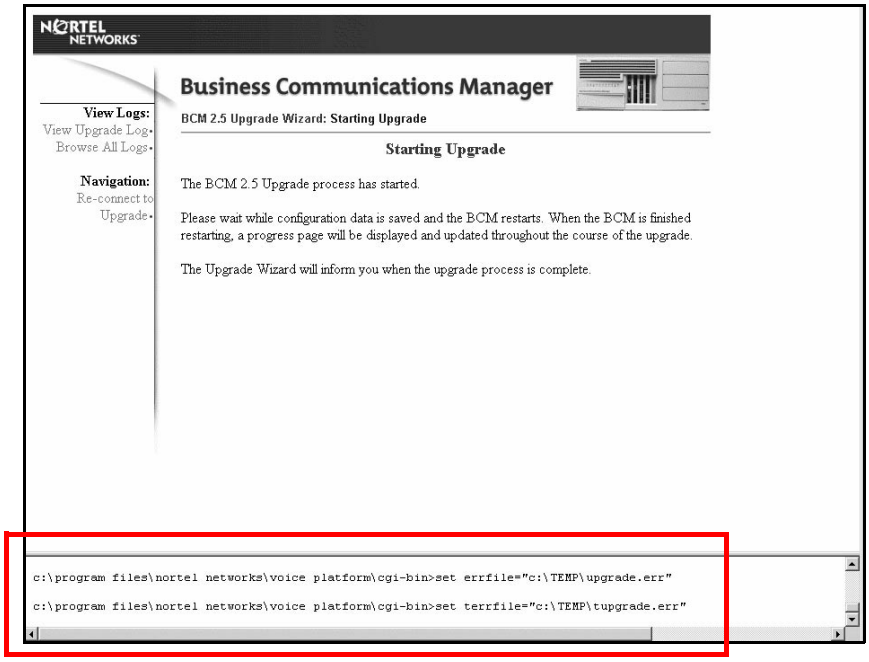
27 If you want audio notification during the upgrade, leave the **Audible Install** as **Yes**
or
if you do not want audio notification, from the **Audible Install** list box select **No**.
Yes is the default.

28 Choose the Copy upgrade files first option if you want to disconnect your computer from the network after you start the upgrade.
If you want to copy the installation files before you install them, from the **Copy upgrade files first** list box select **Yes**
or
if you do not want to copy the installation files, leave **Copy upgrade files first** as **No**.
There is no noticeable difference in the upgrade if you select Yes.

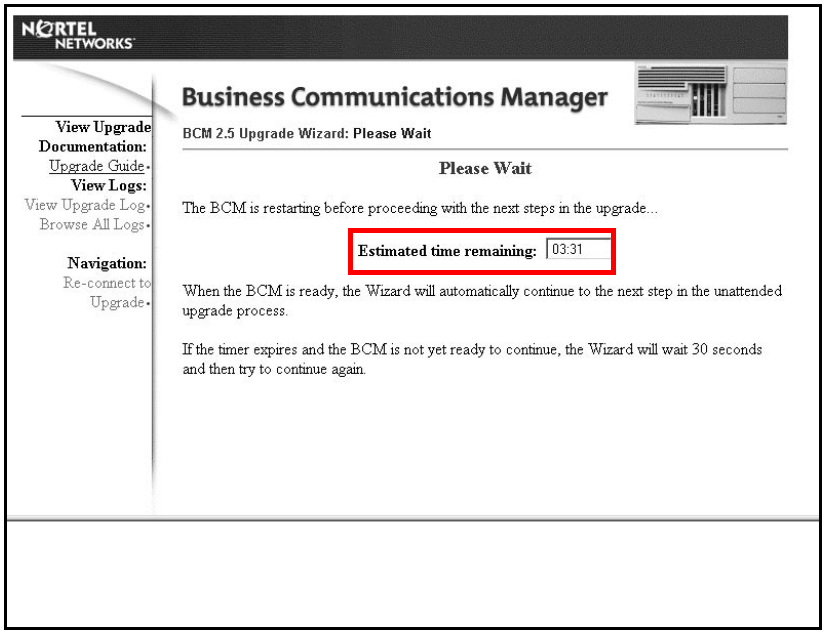
If you are upgrading several Business Communications Manager systems, choose the Copy upgrade files first option. Then you can disconnect from your first Business Communications Manager and start another upgrade.

Do not disconnect until you reach step 30.

29 Click the **Begin** button.
The Starting Upgrade page appears. The progress is shown in the lower frame.

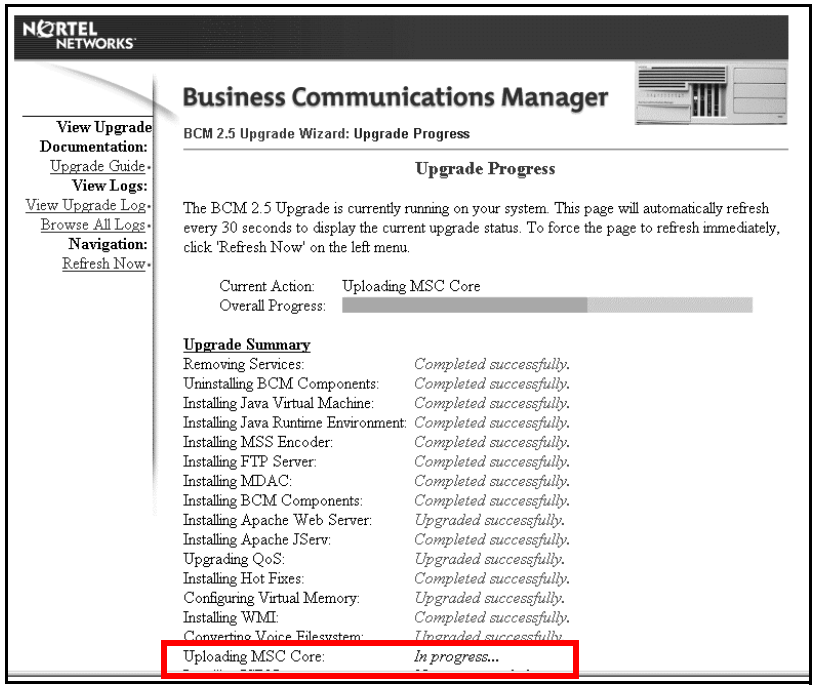

NORTEL NETWORKS
Business Communications Manager
BCM 2.5 Upgrade Wizard: Starting Upgrade
View Logs:
View Upgrade Log
Browse All Logs
Navigation:
Re-connect to Upgrade
Starting Upgrade
The BCM 2.5 Upgrade process has started.
Please wait while configuration data is saved and the BCM restarts. When the BCM is finished restarting, a progress page will be displayed and updated throughout the course of the upgrade.
The Upgrade Wizard will inform you when the upgrade process is complete.
c:\program files\nortel networks\voice platform\cgi-bin>set errfile="c:\TEMP\upgrade.err"
c:\program files\nortel networks\voice platform\cgi-bin>set terrfile="c:\TEMP\tupgrade.err"

While the Business Communications Manager restarts, the Please Wait page appears. The estimated remaining time is shown.


NORTEL NETWORKS
Business Communications Manager
BCM 2.5 Upgrade Wizard: Please Wait
View Upgrade Documentation:
Upgrade Guide
View Logs:
View Upgrade Log
Browse All Logs
Navigation:
Re-connect to Upgrade
Please Wait
The BCM is restarting before proceeding with the next steps in the upgrade...
Estimated time remaining: 03:31
When the BCM is ready, the Wizard will automatically continue to the next step in the unattended upgrade process.
If the timer expires and the BCM is not yet ready to continue, the Wizard will wait 30 seconds and then try to continue again.

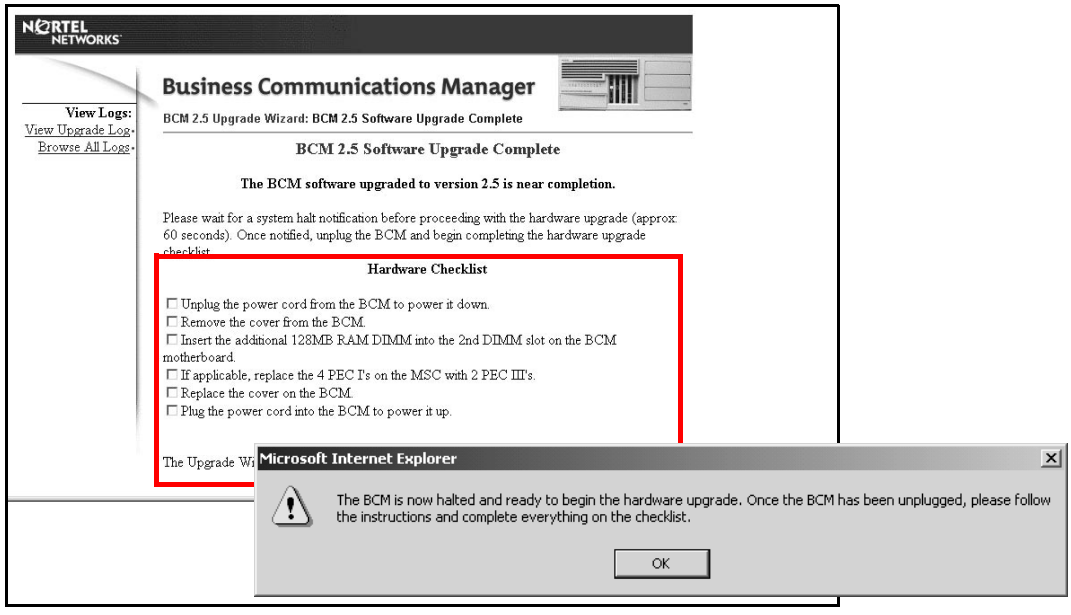
30 If you selected the Copy upgrade files first option in step 28, you can disconnect your computer now and let the upgrade continue.

The Upgrade Progress page appears. The status bar shows the progress of the upgrade.


NORTEL NETWORKS
Business Communications Manager
BCM 2.5 Upgrade Wizard: Upgrade Progress
View Upgrade Documentation:
Upgrade Guide
View Logs:
View Upgrade Log
Browse All Logs
Navigation:
Refresh Now
Upgrade Progress
The BCM 2.5 Upgrade is currently running on your system. This page will automatically refresh every 30 seconds to display the current upgrade status. To force the page to refresh immediately, click 'Refresh Now' on the left menu.
Current Action: Uploading MSC Core
Overall Progress:
Upgrade Summary
Removing Services: Completed successfully.
Uninstalling BCM Components: Completed successfully.
Installing Java Virtual Machine: Completed successfully.
Installing Java Runtime Environment: Completed successfully.
Installing MSS Encoder: Completed successfully.
Installing FTP Server: Completed successfully.
Installing MDAC: Completed successfully.
Installing BCM Components: Completed successfully.
Installing Apache Web Server: Upgraded successfully.
Installing Apache JServ: Completed successfully.
Upgrading QoS: Upgraded successfully.
Installing Hot Fixes: Completed successfully.
Configuring Virtual Memory: Upgraded successfully.
Installing WMI: Completed successfully.
Uploading MSC Core: In progress...

Note: The Uploading MSC Core step can take between 40 minutes to an hour to complete.

When the upgrade is complete, the BCM 2.5 Software Upgrade Complete page appears. A message appears that says the BCM is halted and ready to begin the hardware upgrade. If them message does not appear after 10 minutes, proceed with the hardware upgrade without waiting for the message.

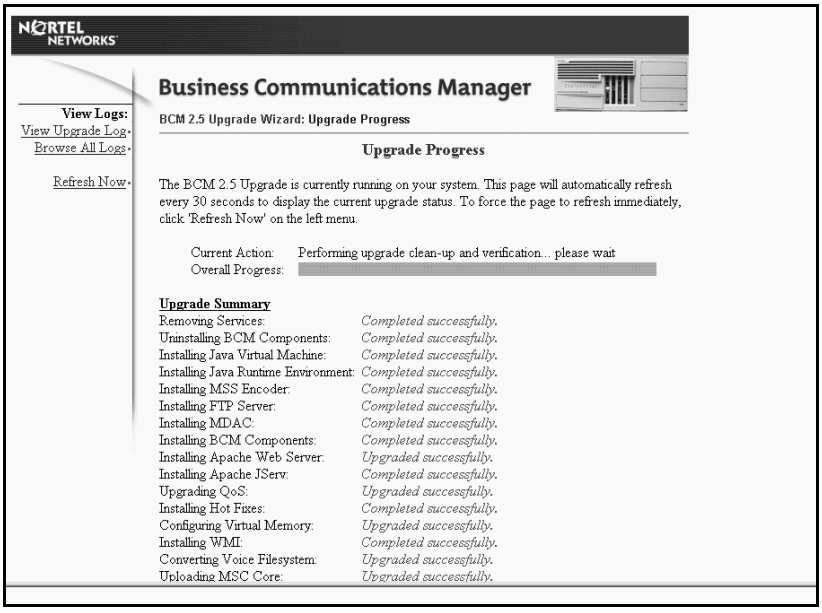

NORTEL NETWORKS
Business Communications Manager
BCM 2.5 Upgrade Wizard: BCM 2.5 Software Upgrade Complete
View Logs:
View Upgrade Log
Browse All Logs
BCM 2.5 Software Upgrade Complete
The BCM software upgraded to version 2.5 is near completion.
Please wait for a system halt notification before proceeding with the hardware upgrade (approx: 60 seconds). Once notified, unplug the BCM and begin completing the hardware upgrade checklist.
Hardware Checklist
Unplug the power cord from the BCM to power it down.
Remove the cover from the BCM.
Insert the additional 128MB RAM DIMM into the 2nd DIMM slot on the BCM motherboard.
If applicable, replace the 4 PEC I's on the MSC with 2 PEC III's.
Replace the cover on the BCM.
Plug the power cord into the BCM to power it up.
Microsoft Internet Explorer
The BCM is now halted and ready to begin the hardware upgrade. Once the BCM has been unplugged, please follow the instructions and complete everything on the checklist.
OK

31 Click the **OK** button.

32 Power down the Business Communications Manager system.

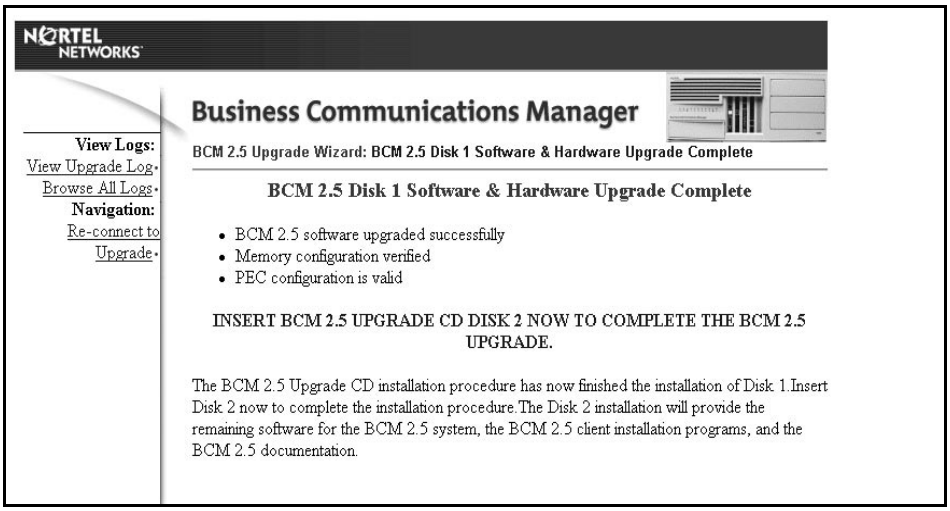
33 Install the DRAM and the MS-PEC III cards according to "Installing the DRAM" on page 33 and "Installing the MS-PEC III cards" on page 37.

34 Reapply power to the Business Communications Manager system.The system reboots. This can take several minutes. The Upgrade Progress page appears. The progress bar shows the system is performing the upgrade clean-up and verification. This can take up to 30 minutes.


NORTEL NETWORKS
Business Communications Manager
BCM 2.5 Upgrade Wizard: Upgrade Progress
View Logs:
View Upgrade Log
Browse All Logs
Refresh Now
Upgrade Progress
The BCM 2.5 Upgrade is currently running on your system. This page will automatically refresh every 30 seconds to display the current upgrade status. To force the page to refresh immediately, click 'Refresh Now' on the left menu.
Current Action: Performing upgrade clean-up and verification... please wait
Overall Progress:
Upgrade Summary
Removing Services: Completed successfully.
Uninstalling BCM Components: Completed successfully.
Installing Java Virtual Machine: Completed successfully.
Installing Java Runtime Environment: Completed successfully.
Installing MSS Encoder: Completed successfully.
Installing FTP Server: Completed successfully.
Installing MDAC: Completed successfully.
Installing BCM Components: Completed successfully.
Installing Apache Web Server: Upgraded successfully.
Installing Apache JServ: Completed successfully.
Upgrading QoS: Upgraded successfully.
Installing Hot Fixes: Completed successfully.
Configuring Virtual Memory: Upgraded successfully.
Installing WMI: Completed successfully.
Converting Voice Filesystem: Upgraded successfully.
Uploading MSC Core: Upgraded successfully.

35 If the telephony programming data is not upgraded successfully, a message appears that warns you that there is a potential loss of telephony programming data.
Click the **Retry** button to restore the telephony programming data
or
click the **Ignore** button if you do not want to restore the telephony programming data.

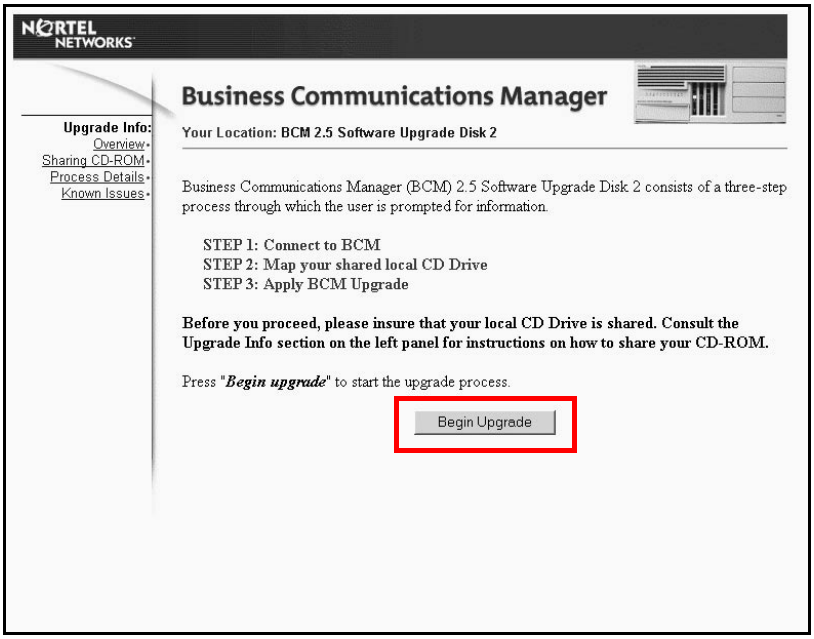
The BCM 2.5 Software & Hardware Upgrade Complete page appears.


NORTEL NETWORKS
Business Communications Manager
View Logs:
View Upgrade Log
Browse All Logs
Navigation:
Re-connect to Upgrade
BCM 2.5 Upgrade Wizard: BCM 2.5 Disk 1 Software & Hardware Upgrade Complete
BCM 2.5 Disk 1 Software & Hardware Upgrade Complete
BCM 2.5 software upgraded successfully
Memory configuration verified
PEC configuration is valid
INSERT BCM 2.5 UPGRADE CD DISK 2 NOW TO COMPLETE THE BCM 2.5 UPGRADE.
The BCM 2.5 Upgrade CD installation procedure has now finished the installation of Disk 1.Insert Disk 2 now to complete the installation procedure.The Disk 2 installation will provide the remaining software for the BCM 2.5 system, the BCM 2.5 client installation programs, and the BCM 2.5 documentation.

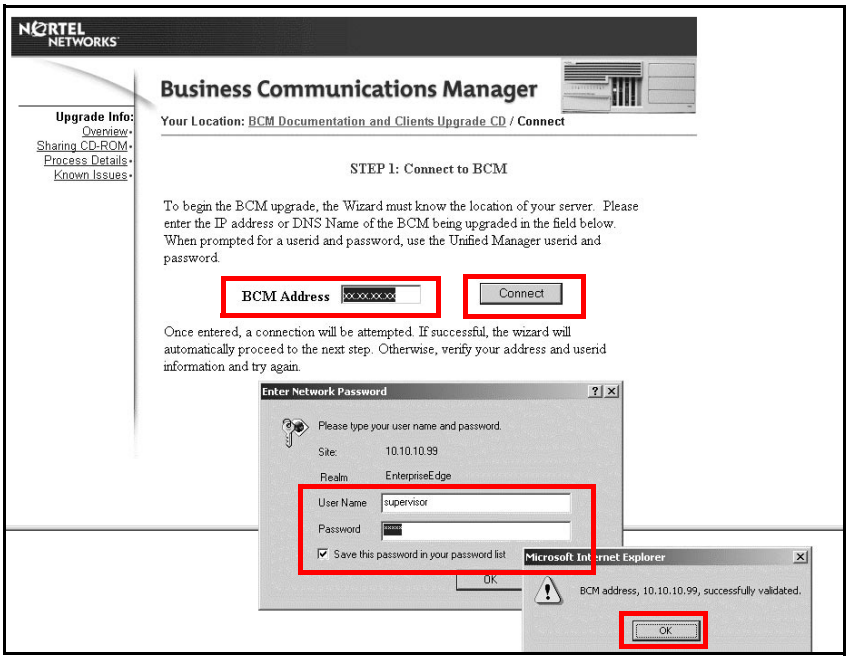
36 Close the browser window.

37 Remove Disk 1 from the CD-ROM and insert Disk 2.
If your CD-ROM drive is configured to run automatically, the BCM Documentation Upgrade CD page appears. If your CD-ROM drive does not run automatically, double-click **index.html**.

The BCM 2.5 Software Upgrade Disk 2 page appears.


NORTEL NETWORKS
Business Communications Manager
Upgrade Info:
Overview
Sharing CD-ROM
Process Details
Known Issues
Your Location: BCM 2.5 Software Upgrade Disk 2
Business Communications Manager (BCM) 2.5 Software Upgrade Disk 2 consists of a three-step process through which the user is prompted for information.
STEP 1: Connect to BCM
STEP 2: Map your shared local CD Drive
STEP 3: Apply BCM Upgrade
Before you proceed, please insure that your local CD Drive is shared. Consult the Upgrade Info section on the left panel for instructions on how to share your CD-ROM.
Press "Begin upgrade" to start the upgrade process.
Begin Upgrade

38 Click the **Begin Upgrade** button.
The Connect to BCM page appears.


NORTEL NETWORKS
Business Communications Manager
Upgrade Info:
Overview
Sharing CD-ROM
Process Details
Known Issues
Your Location: BCM Documentation and Clients Upgrade CD / Connect
STEP 1: Connect to BCM
To begin the BCM upgrade, the Wizard must know the location of your server. Please enter the IP address or DNS Name of the BCM being upgraded in the field below. When prompted for a userid and password, use the Unified Manager userid and password.
BCM Address
Connect
Once entered, a connection will be attempted. If successful, the wizard will automatically proceed to the next step. Otherwise, verify your address and userid information and try again.
Enter Network Password
Please type your user name and password.
Site: 10.10.10.99
Realm EnterpriseEdge
User Name supervisor
Password
Save this password in your password list
OK
Microsoft Internet Explorer
BCM address, 10.10.10.99, successfully validated.
OK

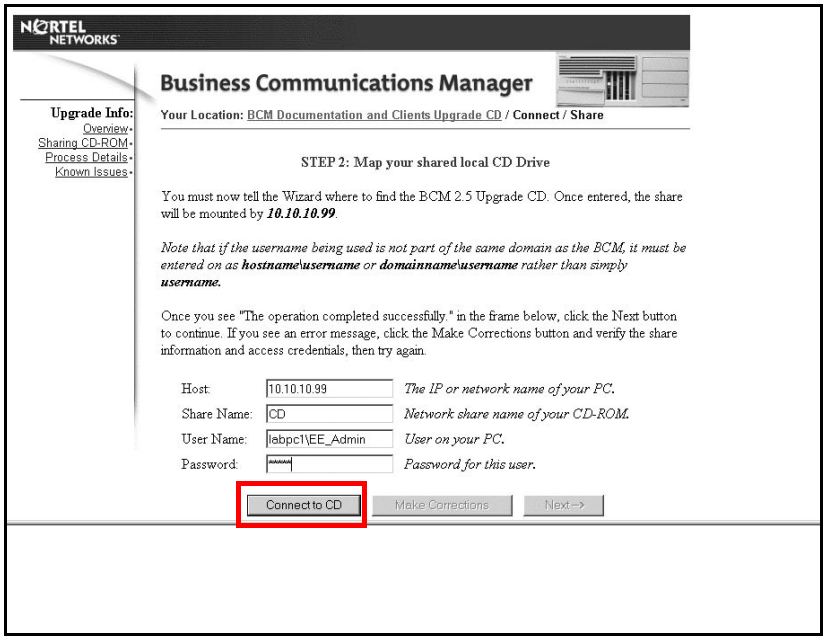
39 In the **BCM Address** box type the IP address, DNS, network name or Fully Qualified Domain Name of your Business Communications Manager and click the **Connect** button. IP address is recommended.
The Enter Network Password dialog box appears.

40 In the **User name** box type your Business Communications Manager user name.
The default Business Communications Manager user name is *supervisor*. If you cannot use your Business Communications Manager user name, use the default password. When the upgrade is complete, you can resume using your user name.

41 In the **Password** box type your Business Communications Manager password.
The default Business Communications Manager password is *visor*. If you cannot use your Business Communications Manager password, use the default password. When the upgrade is complete, you can resume using your password.

42 Click the **OK** button.
A message appears that you are connected to the Business Communications Manager 2.5 system.

43 Click the **OK** button.
The Map your shared local CD drive page appears.


NORTEL NETWORKS
Business Communications Manager
Upgrade Info:
Overview
Sharing CD-ROM
Process Details
Known Issues
Your Location: BCM Documentation and Clients Upgrade CD / Connect / Share
STEP 2: Map your shared local CD Drive
You must now tell the Wizard where to find the BCM 2.5 Upgrade CD. Once entered, the share will be mounted by 10.10.10.99.
Note that if the username being used is not part of the same domain as the BCM, it must be entered on as hostname\username or domainname\username rather than simply username.
Once you see "The operation completed successfully." in the frame below, click the Next button to continue. If you see an error message, click the Make Corrections button and verify the share information and access credentials, then try again.
Host: 10.10.10.99 The IP or network name of your PC.
Share Name: CD Network share name of your CD-ROM.
User Name: lebpc1\EE_Admin User on your PC.
Password: Password for this user.
Connect to CD
Make Corrections
Next-->

44 In the **Host** box type the IP address, DNS, network name or Fully Qualified Domain Name of the computer you are using.

45 In the **Share Name** box type the share name you created for the installation files when you created the shared folder.

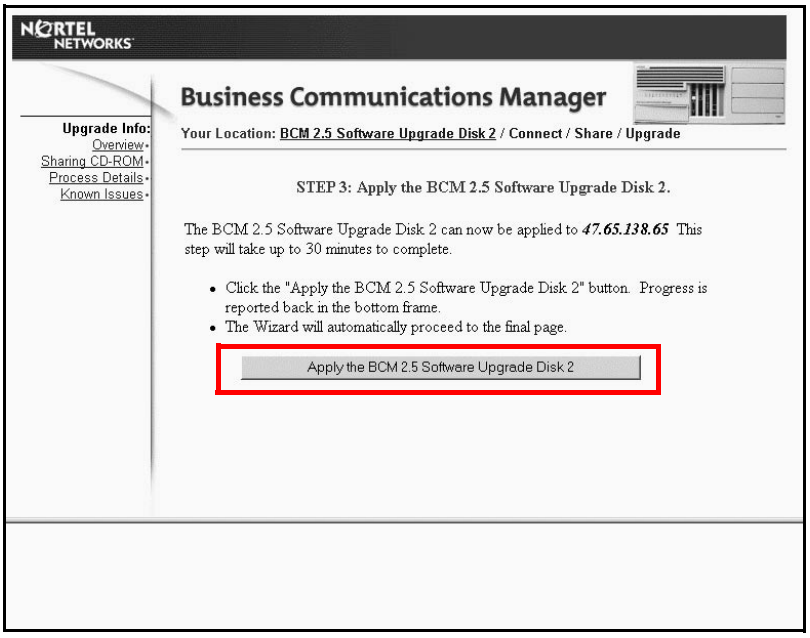
46 In the **User Name** box type *hostname\username* or *domainname\username.*

Note: Be sure to type the information in the User Name box as *hostname\username* or *domainname\username*.

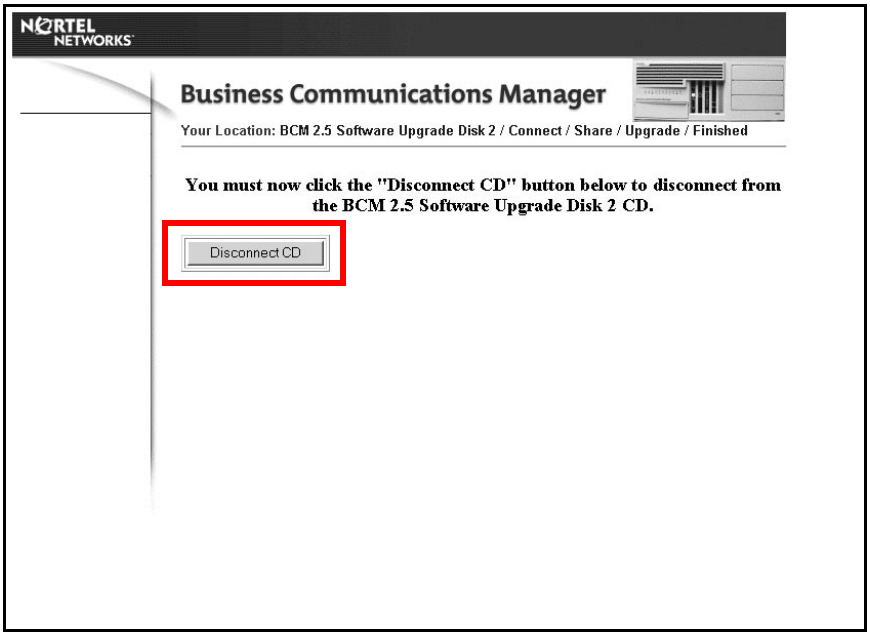
47 In the **Password** box type your password.

48 Click the **Connect to CD** button.
In the lower frame a message appears that you are connected.

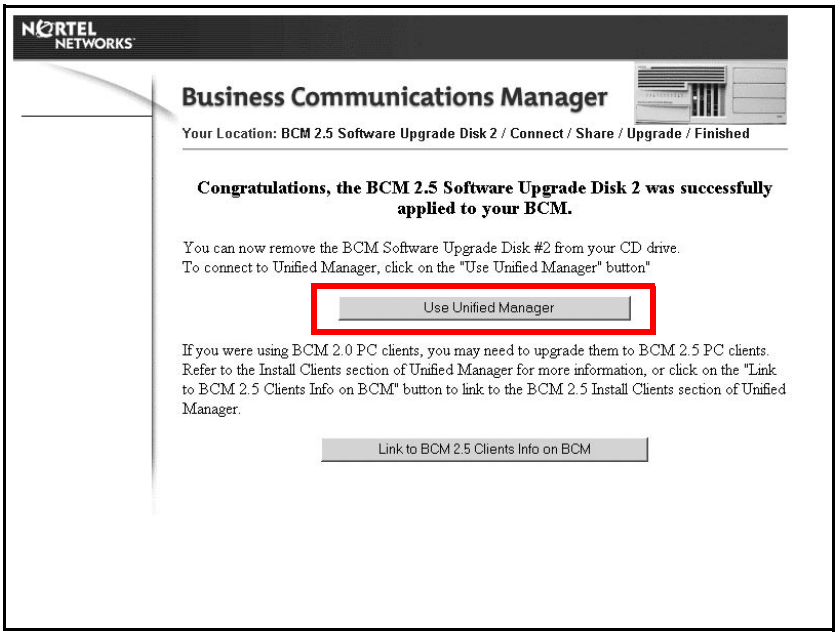
49 Click the **Next** button.
The Apply the Documentation and Clients Upgrade page appears.


NORTEL NETWORKS
Business Communications Manager
Upgrade Info:
Overview
Sharing CD-ROM
Process Details
Known Issues
Your Location: BCM 2.5 Software Upgrade Disk 2 / Connect / Share / Upgrade
STEP 3: Apply the BCM 2.5 Software Upgrade Disk 2.
The BCM 2.5 Software Upgrade Disk 2 can now be applied to 47.65.138.65 This step will take up to 30 minutes to complete.
Click the "Apply the BCM 2.5 Software Upgrade Disk 2" button. Progress is reported back in the bottom frame.
The Wizard will automatically proceed to the final page.
Apply the BCM 2.5 Software Upgrade Disk 2

50 Click the **Apply the BCM 2.5 Software Upgrade Disk 2** button.
The lower frame shows the progress of the upgrade. When the upgrade is complete, the Disconnect page appears.


NORTEL NETWORKS
Business Communications Manager
Your Location: BCM 2.5 Software Upgrade Disk 2 / Connect / Share / Upgrade / Finished
You must now click the "Disconnect CD" button below to disconnect from the BCM 2.5 Software Upgrade Disk 2 CD.
Disconnect CD

51 Click the **Disconnect CD** button.
The Congratulations page appears.


NORTEL NETWORKS
Business Communications Manager
Your Location: BCM 2.5 Software Upgrade Disk 2 / Connect / Share / Upgrade / Finished
Congratulations, the BCM 2.5 Software Upgrade Disk 2 was successfully applied to your BCM.
You can now remove the BCM Software Upgrade Disk #2 from your CD drive.
To connect to Unified Manager, click on the "Use Unified Manager" button"
Use Unified Manager
If you were using BCM 2.0 PC clients, you may need to upgrade them to BCM 2.5 PC clients. Refer to the Install Clients section of Unified Manager for more information, or click on the "Link to BCM 2.5 Clients Info on BCM" button to link to the BCM 2.5 Install Clients section of Unified Manager.
Link to BCM 2.5 Clients Info on BCM

52 Click the **Use Unified Manager** button and continue to configure your system.

53 Start Unified Manager, and verify that all the settings you recorded in the "Business Communications Manager 2.0.3 Configuration Information" on page 39 are applied.
If Unified Manager doesn't start, refer to "If you cannot access Unified Manager after the upgrade" on page 23.

54 If necessary, install the settings you recorded in "Business Communications Manager 2.0.3 Configuration Information" on page 39 that are marked with a ⇦.

55 After you complete the upgrade, you must upgrade the Business Communications Manager clients on each subscriber's computer by following the instructions in "Upgrading clients" on page 28. Then start Unified Manager and go to the Install Clients page. From the Install Clients page you can install the new Business Communications Manager 2.5 Client software on each subscriber's computer. Depending on the subscriber's expertise, you can ask them to upgrade the clients.

Note: Call Center Administrators: If you are using Business Communications Manager 2.0 and you have Disable Overflow Steps selected for any skillsets, when you upgrade to Business Communications Manager 2.5, the overflow rules are enabled when the upgrade process is complete. This is because you cannot disable overflow rules in Business Communications Manager 2.5.

Post-upgrade system check

After you complete the upgrade:

- check that Unified Manager is accessible
- check that the configuration information is applied
- check that telephony programming is correct
- check that voicemail is functioning correctly
- check that OSPF routing is functioning correctly
- reset the Alarm Manager

Check that Unified Manager is accessible

If you cannot access Unified Manager after the upgrade

1. Using Internet Explorer, go to the Business Communication Manager home page at *http://bcm-ipaddress:6800*.
2. Click the **Product support and Maintenance** icon.
3. If you are prompted to, enter the Unified Manager User Name and Password.
4. Click the **Maintenance Tools** link.
5. Click the **Execute a command** link.
6. Enter the command *sc config pep start= disabled* to set Policy Service to manual start. Be sure to enter this exact command, including spaces.
7. Enter the command *shutdown /y /l /c /r* to restart the Business Communications Manager system.

Check the configuration information

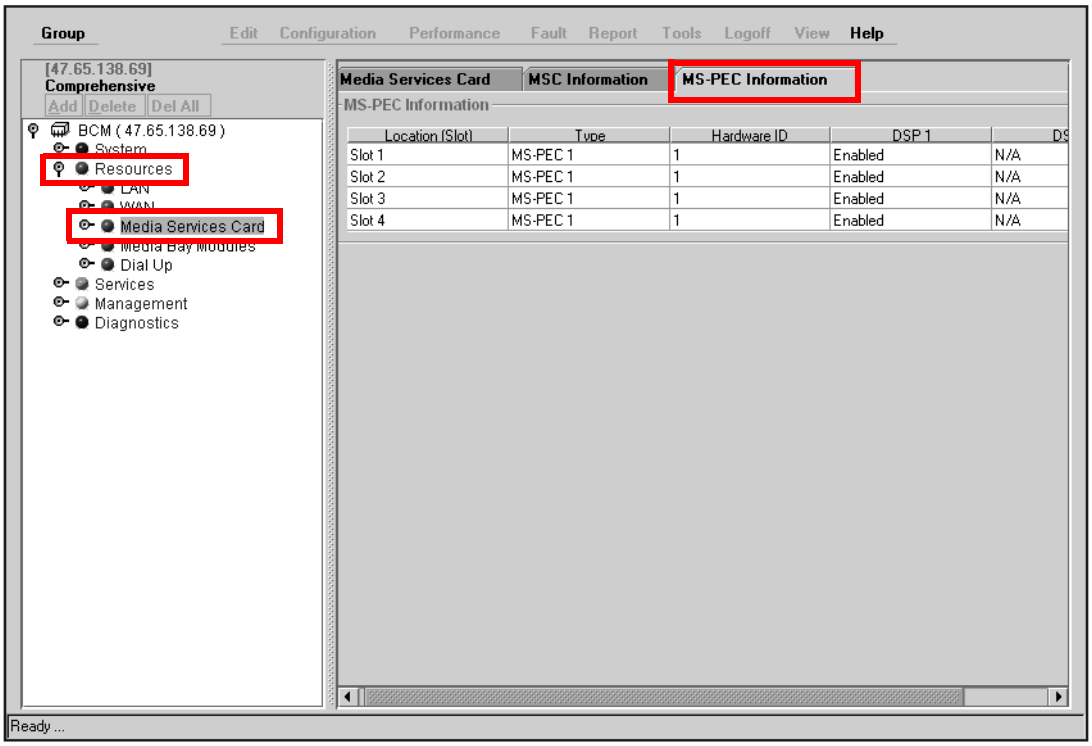
To check your configuration information

1. Refer to the information you entered in "Business Communications Manager 2.0.3 Configuration Information" on page 39.
2. Confirm that settings marked with ⇦ are present on the system. If not, reapply them using the values you recorded.
   Pay specific attention to:
   - OSPF Authentication Type in IP Routing
   - the number of WAN resources in Media Services Card configuration settings
   - all DHCP settings
   - NAT rules
   - if IPX networking is enabled, all IPX network numbers and other IPX configuration settings
   - static routes

3 If you think telephony programming was lost during the upgrade, reboot the Business Communications Manager system after the upgrade is complete with Disk 1 and Disk 2. You can reboot through Unified Manager or by cycling the power on the Business Communications Manager system. You can tell if telephony programming was lost if you receive an error message during the upgrade, or if your phones flash for longer than 10 or 15 minutes after the upgrade is complete.

4 Check the configuration of the MS-PECs:

- In Unified Manager, click the **Resources** key.
- Click the **Media Services Card** heading.
- Click the **MS-PEC Information** tab.
- Check that the information shown for the MS-PECS is correct.



Check the telephony programming

If the telephones connected to the Business Communications Manager system continuously flash after the upgrade for longer than 10 to 15 minutes, you must upload the MSC Core Telephony software and restore the telephony programming.

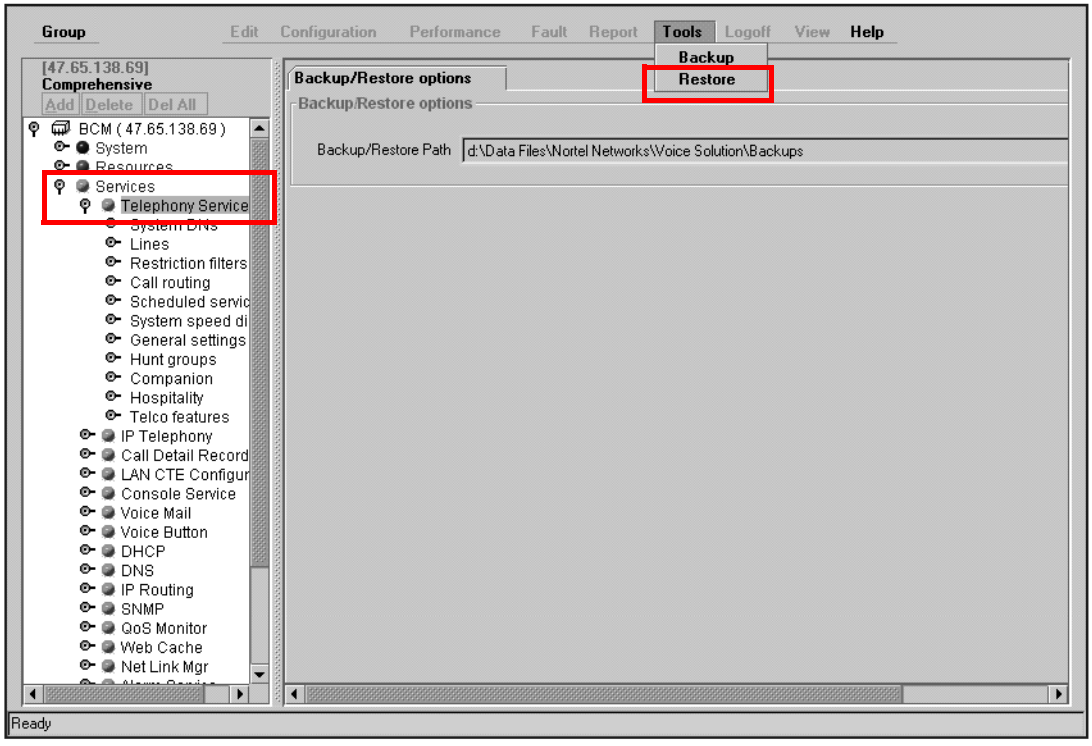
To upload the MSC Core Telephony software

1. Telnet to Business Communications Manager.
   Log on using the *supervisor* or *ee_admin* password.
2. Select **Platform Initialization**.
3. Select the option for the appropriate MSC Core Telephony software.
4. After the upload is complete, use the BRU (Backup Restore Utility) to restore the MSC Core Telephony configuration data onto the system.

On a telephone on your system, check that the correct date is displayed. If the date has reverted to Jan 1 2000, it indicates a telephony restore is necessary.

To restore the telephony programming

1. In Unified Manager, click the **Services** key.
2. Click the **Telephony Services** heading.
3. On the **Tools** menu click **Restore** option and follow the prompts.



Check voicemail

To check whether the voicemail DN has changed after you have restored the MSC Core Telephony data:

1. On a telephone on your system, press [↻] [9] [8] [5] to display the voicemail DN.
2. Compare the DN shown to the voicemail DN you recorded in "System settings" on page 39. If the voicemail DN has changed, you must reconfigure the Telephony programming of the MSC Core Telephony software to use the new voicemail DN.
3. Change to the new voicemail DN:
   - the Call Forward No Answer and Call Forward Busy settings for each station that has a voice messaging mailbox
   - the voicemail DN that Console Service uses, if you use Console Service. This setting is in the Unified Manager configuration settings.

Check OSPF and RIP routing protocols

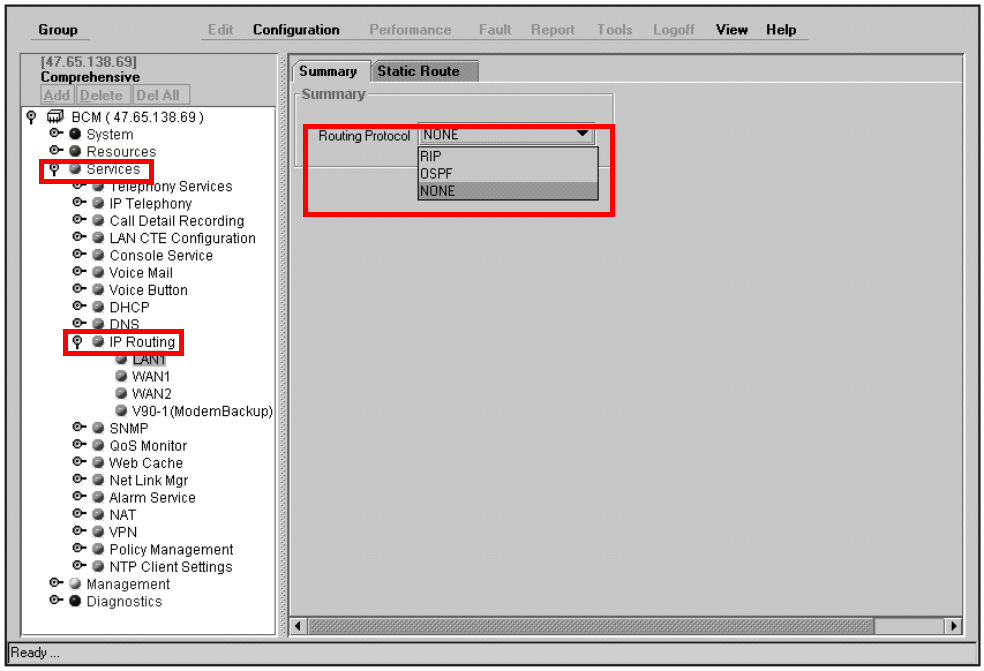
If the OSPF routing protocol is selected for a network adapter and the physical network interface has been disconnected and reconnected, the OSPF routing may not function correctly. This problem only occurs if the physical network interface is disconnected and reconnected.

If the RIP routing protocol is selected for a network adapter, the IP Routing and the specified network adapter may not display a tab for the heading RIP Parameters. You do not have to do this procedure for RIP routing to function correctly. You must do this procedure, however, if the system administrator needs to modify the RIP parameters for the adapter.

To re-establish OSPF and RIP routing protocols

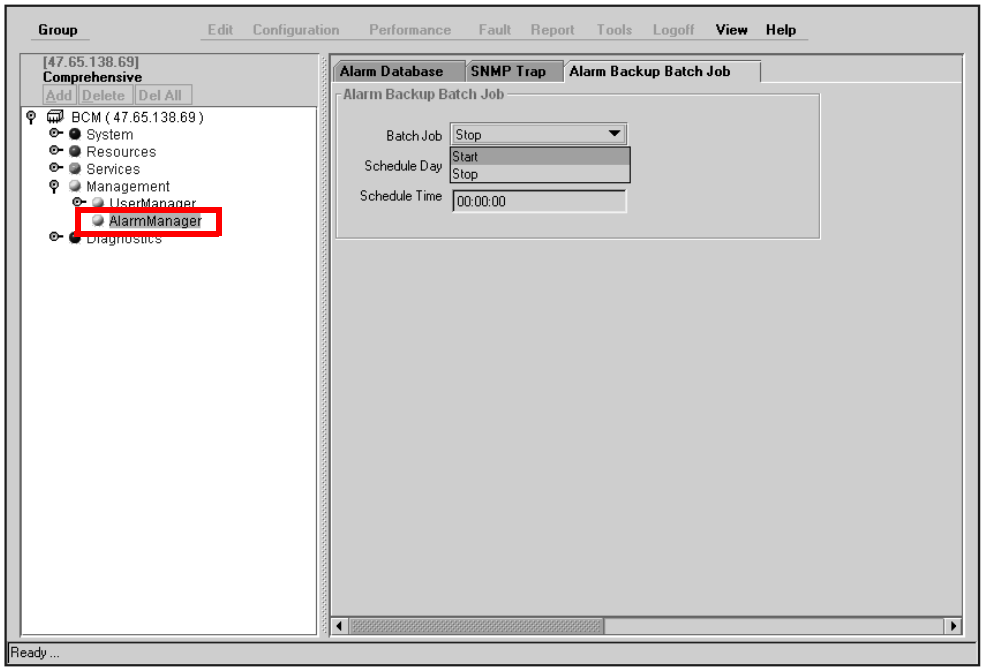
1. Start Unified Manager.
2. Click the **Services** key.
3. Click the **IP Routing** heading.

4 For the specified network adapter, from the Routing Protocol list box select **None** and then select **OSPF**.



Reset the Alarm Manager

If the Alarm Backup Batch Job is scheduled, click the **Alarm Backup Batch Job** tab, and set the Batch Job status to **stop**, then reset it to **start**. If the Batch Job status it already set to stop, set it to **start**, then set it to **stop**, and reset it to **start**.



Upgrading clients

After you upgrade Business Communications Manager, follow these procedures to upgrade Business Communications Manager clients on each subscriber's computer. Every client must be upgraded. Depending on the subscribers' expertise, you can ask them to upgrade the clients.

Attendant Console, i2050 Software Phone, and Personal Call Manager

1. On the Subscriber's computer, click the **Start** button, point to **Settings** and click **Control Panel**.
   The Control Panel window appears.
2. Double-click the **Add/Remove Programs** icon.
   The Add/Remove Programs Properties dialog box appears.
3. From the list of installed programs, select the program you want to uninstall, either Attendant Console, i2050 Software Phone or Personal Call Manager.
4. Click the **Add/Remove** button.
   Follow steps 3 and 4 to remove another of these clients.
5. On the Unified Manager main page, click the **Install Clients** button.
   The Download Client Applications page appears.
6. Download the desktop clients according to the instructions on the Download Client Applications page, and configure the clients according to your system documentation.

Call Detail Recording

Do not uninstall any earlier versions of Call Detail Recording before you install the new version.

Unified Messaging

Before you install Business Communications Manager 2.5 Unified Messaging, uninstall any earlier versions of Unified Messaging.

1. On the Subscriber's computer, click the **Start** button, point to **Settings** and click **Control Panel**.
   The Control Panel window appears.
2. Double-click the **Add/Remove Programs** icon.
   The Add/Remove Programs Properties dialog box appears.
3. From the list of installed programs, select **Unified Messaging**.
4. Reboot the computer.
5. On the Subscriber's computer, click the **Start** button, point to **Settings** and click **Control Panel**.
   The Control Panel window appears.

6 Double-click the **Printers** folder.
The Printers window appears.

7 Right-click **Unified Messaging fax** and select **Delete**.
A message appears that asks you to confirm the deletion.

8 Click the **Yes** button.

9 Close the Printers window. double-click the **Mail and Fax** icon. Depending on which operating system you use, this icon can also be called **Mail**.
The MS Exchange Server Properties dialog box appears, with the Services tab displayed.

10 In the list of services that are set up for the profile, remove:

- Voicemail Address Book
- Voicemail Folders
- Voicemail Messaging

11 Follow the procedure for removing the messaging components that applies to the client installed on the computer.

Outlook 97

1 On the Outlook window, on the **Tools** menu click **Options**.
The Options dialog box appears.

2 Click the **General** tab.

3 Click the **Add-In Manager** button.

4 If any of the these items appear in the list, delete them:

- Unified Messaging Help Extension
- Unified Messaging Strip Extension
- Mailbox Manager

Outlook 98/2000

1 On the Outlook window, on the **Tools** menu click **Options**.
The Options dialog box appears.

2 Click the **Other** tab.

3 Click the **Advanced Options** button.

4 If any of these items appear in the list, delete them:

- Unified Messaging Help Extension
- Unified Messaging Strip Extension
- Mailbox Manager

5 Reboot the computer.

6 On the Unified Manager main page, click the **Install Clients** button.
The Download Client Applications page appears.

7 Download the CallPilot Unified Messaging according to the instructions on the Download Client Applications page, and configure it according to the *Business Communications Manager 2.5 CallPilot Unified Messaging Installation and Maintenance Guide*.

LAN TAPI

The 2.0 LAN TAPI software is replaced the Business Communications Manager 2.5 system by LAN CTE Client.

1 On the computer where the LAN TAPI client software is installed, click the **Start** button and click **Run**.
The Run dialog box appears.

2 In the **Open** box type *tcmsetup /c /d* and click the **OK** button.

3 On the Unified Manager main page, click the **Install Clients** button.
The Download Client Applications page appears.

4 Download the LAN CTE according to the instructions on the Download Client Applications page. When the install program asks you whether you want to install the Telephony Service Provider, click the **Yes** button. You must provide the machine name or IP address of the Business Communications Manager system.

Call Center Reporting

Have the Call Center Reporting Configuration Report available. You must re-enter the settings for the skillset statistical thresholds, print schedules and wallboard information from the settings shown in the Configuration Report.

1 On the computer that has Call Center Reporting installed, click the **Start** button, point to **Settings** and click **Control Panel**.
The Call Center window appears.

2 Double-click the **Add/Remove Programs** icon.
The Add/Remove Programs Properties dialog box appears.

3 From the list of installed programs, select **Call Center Reporting**.

4 Click the **Add/Remove** button.
A message appears that asks you if to confirm the uninstall.

5 Click the **Yes** button.

6 In Windows Explorer, go to the Call Center Reporting folder.
By default, this folder is located at \Program Files\Nortel Networks\Call Center Reporting.

7 Select the files you want to delete:

- If you do not want to retain the old statistical files, or if the computer you are using is a client computer and does not have a stats folder, select all of the files in the Call Center Reporting folder.

Note: If you want to retain the old statistical files, select all of the files in the Call Center Reporting folder except for the stats folder.

8 Right-click the list of files you selected and click **Delete**.
A message appears that asks you to confirm the deletion.

9 Click the **Yes** button.

10 On the Unified Manager main page, click the **Install Clients** button.
The Download Client Applications page appears.

11 Download Call Center Reporting Master Client or Call Center Multiple Client according to the instructions on the Download Client Applications page, and configure it according to the *Nortel Networks Call Center Reporting Set Up and Operation Guide*.

12 To uupload the Agent, Line and Skillset Configuration details, log on to Call Center Reporting, and on the Agent, Skillset and Line tabs click the **Upload** button.

13 Re-enter the settings for the skillset statistical thresholds, print schedules and wallboard information from the settings shown in the Configuration Report.

Installing the DRAM

Danger: Electrical shock warning.
Disconnect the power cord, telephone cables and network cables before opening the unit. Read and follow the installation instructions carefully.

Tools required

Before you install the DRAM, ensure you have the following equipment:

- Phillips screwdriver #2, with a blade 3.5 in. long
- 3/16 inch slot screwdriver
- antistatic grounding strap

Caution: You must wear an antistatic grounding strap at all times when you handle electronic components. Failure to do so can result in damage to the equipment.

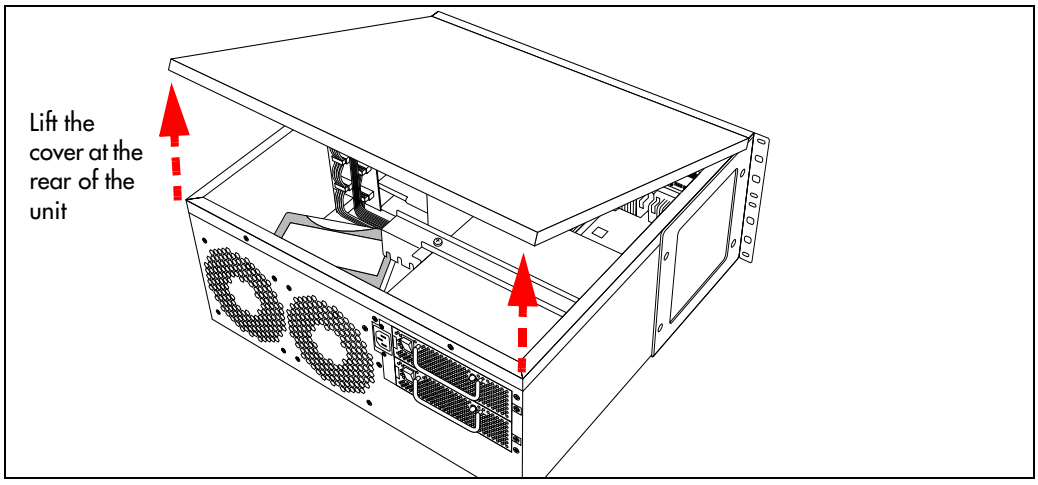
Installing the DRAM

To install the DRAM, you must ensure the system is safely disconnected from the trunk lines and shut down. Next, you can remove the top of the Business Communications Manager base unit to access the inside of it.

To install the DRAM

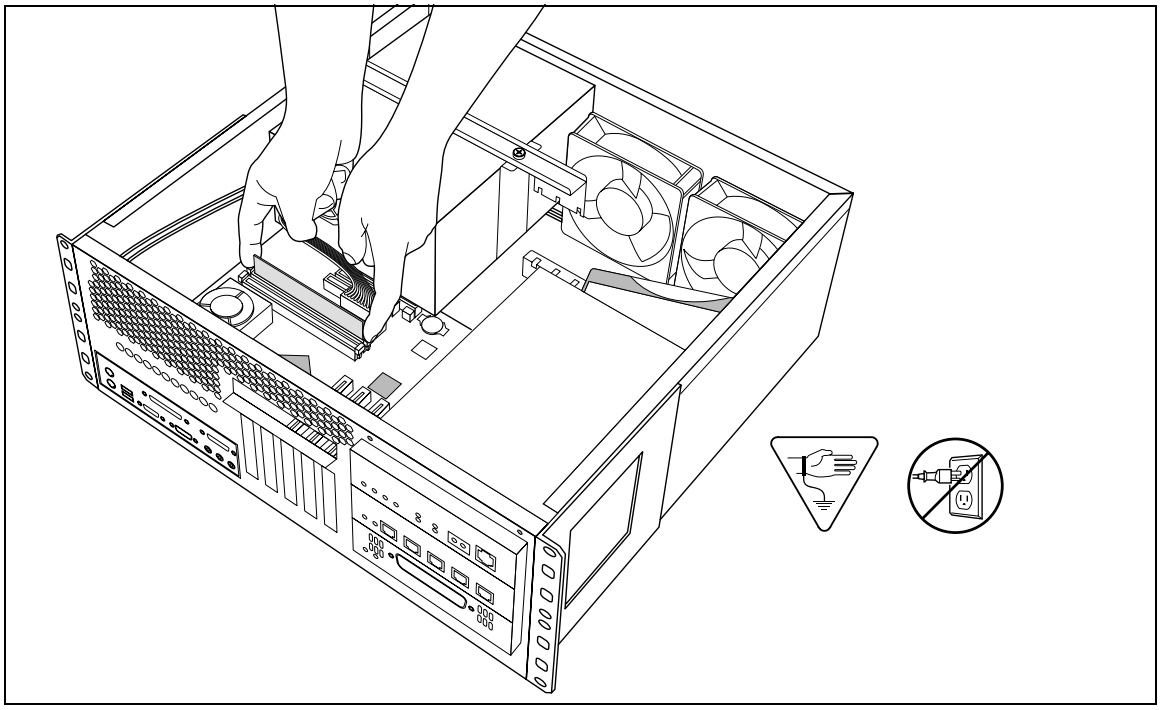
1. Attach one end of the grounding strap to your wrist and the other end to a grounded metal surface.
2. Remove the two screws from the cover, at the back of the unit.
3. Lift the back of the cover and slide it back and up.

Opening the top of the unit



Danger: Risk of shock. Disconnect the power cord, telephone cables and network cables before opening the unit. Read and follow installation instructions carefully.

Installing the DRAM



4 Slide the DRAM, edge connectors first, into the slot.

Note: The DRAM has two notches on the edge connector. Position the DRAM so that one of the notches is on the side of the slot nearest to the Business Communications Manager cards.

5 Carefully push the DRAM down until the fastening tabs clip to the side of the DRAM.

Note: Do not force the DRAM into its slot. If the DRAM does not slide in easily, check the alignment of the DRAM.

6 If you are going to install the optional MS-PEC III cards, do not replace the cover of the unit. Go to "Installing the MS-PEC III cards" on page 37

or

if you are not going to install the optional MSP-PEC III cards, replace the cover of the unit and restore the unit to operation.

Installing the MS-PEC III cards

Warning: Possible data loss. Incorrect handling of the MS-PEC cards during installation can result in the loss of telephony programming. When you insert or remove the MS-PEC cards, be careful not to contact the MS-PEC cards with the MSC Printed Circuit Board.

Tools required

Before you install the MS-PEC III cards, ensure you have the following equipment:

- Phillips screwdriver #2, with a blade 3.5 in. long
- 3/16 inch slot screwdriver
- antistatic grounding strap

Caution: You must wear an antistatic grounding strap at all times when you handle electronic components. Failure to do so can result in damage to the equipment or loss of telephony programming.

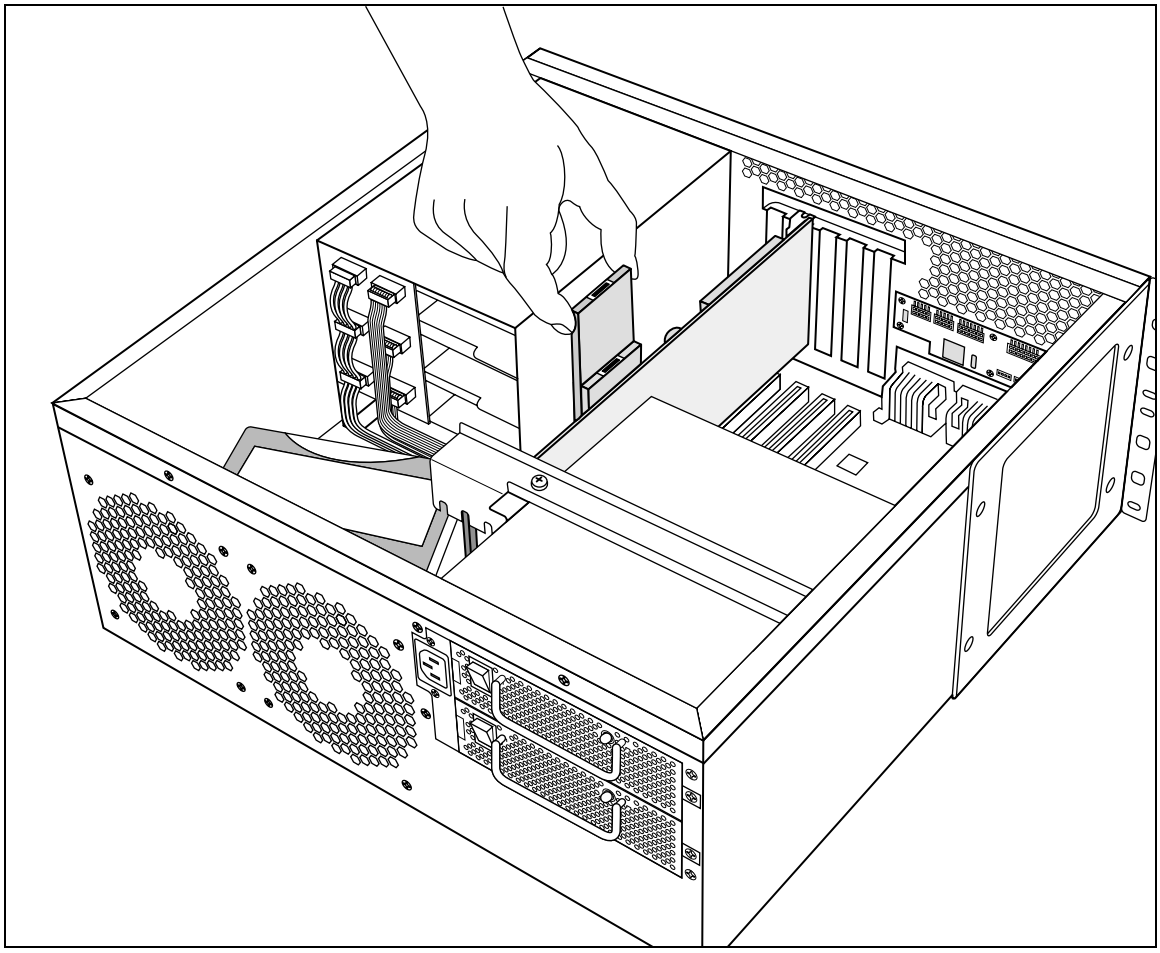
To install the MS-PEC III cards

1. Attach one end of the grounding strap to your wrist and the other end to a grounded metal surface.
2. Remove the MS-PEC I cards by grasping the top edge of the card and pulling it upward. Refer to “Removing or installing an MS-PEC card” on page 38. When you remove the MS-PEC I cards, be careful not to contact the MS-PEC I cards with the MSC Printed Circuit Board.
3. Decide which slot you are going to install the MS-PEC III cards into on the MSC board. If you have two MS-PEC III cards, put them in the slots furthest away from the front face plate of the unit.
4. Line an MS-PEC III card up between the rails of the slot.
5. Carefully push the MS-PEC III card down into the slot until it is firmly seated. Refer to “Removing or installing an MS-PEC card” on page 38. When you insert the MS-PEC cards, be careful not to contact the MS-PEC III cards with the MSC Printed Circuit Board.

Note: Do not force the card into its slot. If the MS-PEC III card does not slide in easily, check the alignment.

6. Replace the cover of the unit.

Removing or installing an MS-PEC card



Business Communications Manager 2.0.3 Configuration Information

Before you upgrade your system to 2.5, use these tables to record your 2.0.3 settings. After the upgrade, confirm that the settings marked with ⇦ are present on the system. If not, reapply them using the values you record in these tables.

System settings

System name	
Time zone	
Country	
Voicemail DN	

Passwords

BCM account (default: ee_admin) ⇦	
Voicemail/CallPilot password ⇦	
VNC password	
Unified Manager user ID (default: supervisor)	
Unified Manager password (default: visor)	

Note: The CallPilot password is the last 4 digits of the Voicemail password. If the CallPilot password is 0000, you will be prompted to change it the first time you access CallPilot Manager.

Alarm Backup

Alarm Backup Batch Job Day	
Alarm Backup Batch Job Time	
Alarm Database Max Number Record	

Networking settings

Record the IP addresses for the hardware profile you use.

Hardware Profile 1			
LAN 1	.	.	.
WAN	.	.	.

Hardware Profile 2			
LAN 1	.	.	.
LAN 2	.	.	.
V.90	.	.	.

Hardware Profile 3			
LAN 1	.	.	.
LAN 2	.	.	.
WAN 1 (V35_PPP/frame)	.	.	.
WAN 2 (X21_PPP/frame)	.	.	.

Hardware Profile 4			
LAN 1	.	.	.
LAN 2	.	.	.

Telephony

Use these tables to record your telephony settings.

Mobility protocol	Etiquette	CT2+	Not applicable for Europe
Carrier protocol	T1	E1	
Region			
Software version			
Template			
DN length (3 - 7)			
Start DN			

Resources configured on Media Services Card	
Number of Voice Ports	
Number of Fax Ports (0 - 2)	
WAN channels enabled (0 or 8) ⇦	

VoIP Gateway

Local Gateway (select one)	LAN 1	LAN 2	WAN 1	WAN 2
Codec preference order (rank them from 1st to 5th)				
_____ G.729	_____ G.723-5.3kbits/s	_____ G.723-6.3kbits	_____ G.711-uLaw	_____ G.711-aLaw

Remote Gateways					
Name	**Destination**	**QoS monitor**	**Transmit threshold**	**Receive threshold**	**Destination digits**

Data settings

DHCP mode ⇦	
DHCP status ⇦	Enabled Disabled
DHCP ranges (Adapter: start IP address - end IP address) ⇦	
DHCP excluded ranges (Adapter: start IP address - end IP address) ⇦	
DNS Status	Enabled Disabled
IP Domain name	
Primary Server IP Address	
Secondary server IP Address	
IP Routing	
IP Routing Status	Enabled Disabled
OSPF Router ID	
OSPF Router Area ID	
OSPF Authentication type ⇦	None Password
OSPF Routing Protocol	LAN 1 LAN 2 WAN 1 WAN 2
RIP Routing Protocol	LAN 1 LAN 2 WAN 1 WAN 2
WINS node type (0 - 8)	

DHCP Scope information

For each adapter, record:

Adapter	
DHCP Scope status	
DNS Server	
WINS Server	
Default Gateway	
Lease Time (in seconds) ⇦	

Adapter	
DHCP Scope status	
DNS Server	
WINS Server	
Default Gateway	
Lease Time (in seconds) ⇦	

Adapter	
DHCP Scope status	
DNS Server	
WINS Server	
Default Gateway	
Lease Time (in seconds) ⇦	

Adapter	
DHCP Scope status	
DNS Server	
WINS Server	
Default Gateway	
Lease Time (in seconds) ⇦	

Static Routes ⇦

Adapter	Destination Address	Destination Mask	Next Hop Router	Metric Value

SNMP Status	Enabled	Disabled
QoS Status	Enabled	Disabled
QoS Monitor Status	Enabled	Disabled
Web Cache Server Address		
Cache Mode		
Net Link Manager Status	Enabled	Disabled
Primary WAN Connection	Permanent	Dialup
Next Hop On Primary Link		
Alarm Service Status	Enabled	Disabled
Alarm Manager - Max Number Record ⇦		
NAT Status	Enabled	Disabled
IP Firewall Filter Status	Enabled	Disabled

User Manager

You can make additional copies of this page.

User Name	Password

IP Firewall Filters

Adapter type _____

Logging Settings	
Logging	Enabled Disabled
Logging Level	1 2 3
Log Viewing Options	
Start date	Month Day Year
End date	Month Day Year
Default Rules Status	
Input Filters' Rule Order	
Input Filters' Rule Setting	
Rule Name	
Stateful	
Disposition	
Protocol	
Source IP Type	
Source IP	
Source Range Mask	
Source Port Range	
Destination IP Type	
Destination IP	
Destination Range Mask	
Destination Port Range	
Source Routing	
IP Options	
Quick	
Output Filters' Rule Order	
Output Filters' Rule Setting	
Rule Name	

Stateful	
Disposition	
Protocol	
Source IP Type	
Source IP	
Source Range Mask	
Source Port Range	
Destination IP Type	
Destination IP	
Destination Range Mask	
Destination Port Range	
Source Routing	
IP Options	
Quick	

Note: You can copy these pages to record additional adapter settings.

IPX Settings ⇦

If you use IPX, record these settings and verify them after the upgrade.

IPX Routing Status ⇦	
Internal Network Number ⇦	
IPX Log Level ⇦	
RIP Log Level ⇦	
SAP Log Level ⇦	

IPX adapter settings ⇦

Adapter ⇦	
Interface Name ⇦	
Input filter action ⇦	
Output filter action ⇦	
Network number ⇦	
Frame type ⇦	

Adapter ⇦	
Interface Name ⇦	
Input filter action ⇦	
Output filter action ⇦	
Network number ⇦	
Frame type ⇦	

Adapter ⇦	
Interface Name ⇦	
Input filter action ⇦	
Output filter action ⇦	
Network number ⇦	
Frame type ⇦	

ISDN Dial Up Connections

Telephone number	User name	Password	Incoming interface password	LLDial Interface #	DNS value	IP address assigned (for incoming remote access)

Network Address Translation (NAT) Rule Settings ⇦

Adapter	Direction	Protocol	Private IP Type	Private IP	Private Port Range	Public IP Type	Public IP	Public Range Mask	Public Port Range